

Datasheet for ABIN3078000

CYP26A1 Protein (AA 1-497) (Strep Tag)



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Overview

Quantity:	1 mg
Target:	CYP26A1
Protein Characteristics:	AA 1-497
Origin:	Human
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This CYP26A1 protein is labelled with Strep Tag.
Application:	SDS-PAGE (SDS), Western Blotting (WB), ELISA

Product Details

Brand:	AliCE®
Sequence:	MGLPALLASA LCTFVLPLLL FLAAIKLWDL YCVSGRDRSC ALPLPPGTMG FPFPGETLQM VLQRRKFLQM KRRKYGFIYK THLFGRPTVR VMGADNVRR I LLGEHRLVSV HWPASVRTIL GSGCLSNLHD SSHKQRKKVI MRAFSREALE CYVPVITEEV GSSLEQWLSC GERGLLVYPE VKRLMFRIAM RILGCEPQL AGDGDSESQL VEA FEEMTRN LFSLPIDVPF SGLYRGMKAR NLIHARIEQN IRAKICGLRA SEAGQGCKDA LQLLIEHSWE RGERLDMQAL KQSSTELLFG GHETTASAAT SLITYLGLYP HVLQKVREEL KSKGLLCKSN QDNKLDMEIL EQLKYIGCVI KETLRLNPPV PGGFRVALKT FELNGYQIPK GWNVIYSICD THDVAEIFTN KEEFNPD RFM LPHPEDASRF SFIPFGGGLR SCVGKEFAKI LLKIFTVELA RHCDWQLLNG PPTMKTSPTV YPVDNLPARF THFHGEI Sequence without tag. The proposed Strep-Tag is based on experience s with the expression system, a different complexity of the protein could make another tag necessary. In case you

have a special request, please contact us.

Characteristics:

Key Benefits:

- Made in Germany - from design to production - by highly experienced protein experts.
- Protein expressed with ALiCE® and purified in one-step affinity chromatography
- These proteins are normally active (enzymatically functional) as our customers have reported (not tested by us and not guaranteed).
- State-of-the-art algorithm used for plasmid design (Gene synthesis).

This protein is a **made-to-order protein** and will be made for the first time for your order. Our experts in the lab try to ensure that you receive soluble protein.

The big advantage of ordering our **made-to-order proteins** in comparison to ordering custom made proteins from other companies is that there is no financial obligation in case the protein cannot be expressed or purified.

Expression System:

- ALiCE®, our Almost Living Cell-Free Expression System is based on a lysate obtained from *Nicotiana tabacum* c.v.. This contains all the protein expression machinery needed to produce even the most difficult-to-express proteins, including those that require post-translational modifications.
- During lysate production, the cell wall and other cellular components that are not required for protein production are removed, leaving only the protein production machinery and the mitochondria to drive the reaction. During our lysate completion steps, the additional components needed for protein production (amino acids, cofactors, etc.) are added to produce something that functions like a cell, but without the constraints of a living system - all that's needed is the DNA that codes for the desired protein!

Concentration:

- The concentration of our recombinant proteins is measured using the absorbance at 280nm.
- The protein's absorbance will be measured against its specific reference buffer.
- We use the ExPASy's ProtParam tool to determine the absorption coefficient of each protein.

Purification:

One-step Strep-tag purification of proteins expressed in Almost Living Cell-Free Expression System (ALiCE®).

Purity:

> 70-80 % as determined by SDS PAGE, Western Blot and analytical SEC (HPLC).

Grade:

custom-made

Target Details

Target:	CYP26A1
Alternative Name:	CYP26A1 (CYP26A1 Products)
Background:	Cytochrome P450 26A1 (CYP26A1) (EC 1.14.13.-) (Cytochrome P450 retinoic acid-inactivating 1) (Cytochrome P450RAI) (hP450RAI) (Retinoic acid 4-hydroxylase) (Retinoic acid-metabolizing cytochrome),FUNCTION: A cytochrome P450 monooxygenase involved in the metabolism of retinoates (RAs), the active metabolites of vitamin A, and critical signaling molecules in animals (PubMed:22020119, PubMed:9228017, PubMed:9716180). RAs exist as at least four different isomers: all-trans-RA (atRA), 9-cis-RA, 13-cis-RA, and 9,13-dicis-RA, where atRA is considered to be the biologically active isomer, although 9-cis-RA and 13-cis-RA also have activity (Probable). Catalyzes the hydroxylation of atRA primarily at C-4 and C-18, thereby contributing to the regulation of atRA homeostasis and signaling (PubMed:22020119, PubMed:9228017, PubMed:9716180). Hydroxylation of atRA limits its biological activity and initiates a degradative process leading to its eventual elimination (Probable). Involved in the conversion of atRA to all-trans-4-oxo-RA. Able to metabolize other RAs such as 9-cis, 13-cis and 9,13-di-cis RA (By similarity) (PubMed:9228017). Can oxidize all-trans-13,14-dihydroretinoate (DRA) to metabolites which could include all-trans-4-oxo-DRA, all-trans-4-hydroxy-DRA, all-trans-5,8-epoxy-DRA, and all-trans-18-hydroxy-DRA (By similarity). May play a role in the oxidative metabolism of xenobiotics such as tazarotenic acid (PubMed:26937021). {ECO:0000250 UniProtKB:O55127, ECO:0000269 PubMed:22020119, ECO:0000269 PubMed:26937021, ECO:0000269 PubMed:9228017, ECO:0000269 PubMed:9716180, ECO:0000305 PubMed:22020119, ECO:0000305 PubMed:9228017}.
Molecular Weight:	56.2 kDa
UniProt:	O43174
Pathways:	Retinoic Acid Receptor Signaling Pathway , Monocarboxylic Acid Catabolic Process

Application Details

Application Notes:	In addition to the applications listed above we expect the protein to work for functional studies as well. As the protein has not been tested for functional studies yet we cannot offer a guarantee though.
Comment:	ALiCE®, our Almost Living Cell-Free Expression System is based on a lysate obtained from <i>Nicotiana tabacum</i> c.v.. This contains all the protein expression machinery needed to produce even the most difficult-to-express proteins, including those that require post-translational

Application Details

modifications.

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Restrictions: For Research Use only

Handling

Format:	Liquid
Buffer:	The buffer composition is at the discretion of the manufacturer. Standard Storage Buffer: PBS pH 7.4, 10 % Glycerol Might differ depending on protein.
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	12 months